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ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			MILLS, DONALD L	
			ART UNIT	PAPER NUMBER
			2662	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,715

Applicant(s)

IWAMURA ET AL.

Examiner

Donald L Mills

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of numerous grammatical errors (See abstract). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9, 13, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the claim specifies *said own ATM communication apparatus* (See claim 1, line 6.) There is insufficient antecedent basis for this limitation in the claim. It is unclear from the context of the claim what constitutes an *own ATM communication apparatus*. For the purpose of this examination, the Examiner will interpret an “own ATM communication apparatus” as any ATM switch.

Regarding claim 1, the claim specifies *said assigned optical network units* (See claim 1, lines 24-25.) There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 1, the claim specifies *said bandwidth controller* (See claim 1, line 25.) It is unclear from the context of the claim whether *said bandwidth controller* refers to the bandwidth controller or the shared bandwidth controller

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Regarding claims 5 and 14, the claims specify “an invalid cell detector that detects invalid cells” (See claim 5, lines 17-18.) The amended claims describe the function of the invalid cell detector, but it is still unclear from the context of the claim what constitutes an “invalid cell.” One of ordinary skill in the art would not be able to ascertain whether an “invalid cell” is a cell consisting of less than 53 bytes, a unique cell, or an error cell. For the purpose of this examination, the Examiner will interpret “invalid cells” as idle cells.

Regarding 13, the term "substantially" (See claim 13, line 6,) is a relative term, which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The receiving bandwidths have been rendered indefinite by use of the term “substantially.”

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Ma et al (US 5,953,338), hereinafter referred to as Ma.

Regarding claim 10, the primary reference further teaches *a bandwidth control method that issues permission to permit transmission of ATM cells to a plurality of optical network units and controls a bandwidth of ATM cells received from each of said optical network units*

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(Referring to Figure 1B, an ATM dynamic admission control system **160** connected to ATM switch **130A** which manages calls for the ATM network from customer networks **110A**, **110B**, **110C**, ..., which are optically coupled. See Abstract,) *comprising:*

Dividing a transmission bandwidth which said plurality of optical network units use for transmission of ATM cells to a basic bandwidth and a shared bandwidth/Dividing said basic bandwidth and assigning it to said optical network units/Setting an upper-limit bandwidth which represents an usable maximum bandwidth to each of said optical network units (Referring to Figures 1B, 9A, and 9B, bandwidth manager **150** dynamically manages bandwidths utilized by virtual paths in reaction or anticipation to traffic volume levels, comprising a base level. The bandwidth manager **150** assigns shared bandwidth based upon the bandwidth capacity (upper-limit bandwidth), monitored bandwidth, and the scenario when a client exceeds its allocated bandwidth, in response to the usage monitor module **145**. See column 12, lines 66-67 and column 13, line 1;)

Supervising traffic situation of ATM cells from any one of a plurality of said optical network units (Referring to Figure 1B, centralized control module **160** manages calls for the network from customer networks **110A**, **110B**, **110C**, ..., which are optically coupled. See column 6, lines 35-36;)

Detecting receiving bandwidth status which represents a bandwidth used by said any one of said optical network units (Referring to Figure 1B, 9A, and 9B, centralized call admission control/usage monitor module **145** monitors the traffic load of clients. See column 8, lines 13-17;)

Comparing a detected receiving bandwidth status and a bandwidth which is set as an usable area to said any of said optical network units, and judging whether a wider bandwidth than said bandwidth which is set to said any one of said optical network units is needed or not/Where it is judged that said wider bandwidth than said bandwidth which is set to be said any one of said optical network units is needed, assigning a shared bandwidth with an amount according to said upper-limit bandwidth set to said any one of said optical network units within said shared bandwidth, to said any one of said optical network units (Referring to Figures 1B, 9A, and 9B, bandwidth manager 150 dynamically manages bandwidths utilized by virtual paths in reaction or anticipation to traffic volume levels, comprising a base level. The bandwidth manager 150 assigns shared bandwidth based upon the bandwidth capacity (upper-limit bandwidth), monitored bandwidth, and the scenario when a client exceeds its allocated bandwidth, in response to the usage monitor module 145. See column 12, lines 66-67 and column 13, line 1,)

Where a sum of said basic bandwidth of said any one of said optical network units and said assigned shared bandwidth does not exceed said upper-limit bandwidth, setting said sum as a bandwidth usable by said any of said optical network units, and where the sum exceeds said upper-limit bandwidth, setting said upper-limit bandwidth as a bandwidth usable by said any one of said optical network units (Note: the Examiner interprets the sum of the basic bandwidth and shared bandwidth as logically equivalent to the total capacity of the link which cannot be exceeded. Since, Ma discloses the bandwidth capacity (upper-limit bandwidth) as the limiting value, the sum of the basic and shared bandwidth will never exceed the bandwidth capacity. Therefore, the bandwidth capacity (upper-limit bandwidth) will always act as the limiting value,

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which is equivalent to the claimed invention. Referring to Figures 1B, 9A, and 9B, bandwidth manager 150 dynamically manages bandwidths utilized by virtual paths in reaction or anticipation to traffic volume levels, comprising a base level. The bandwidth manager 150 assigns shared bandwidth based upon the bandwidth capacity (upper-limit bandwidth), monitored bandwidth, and the scenario when a client exceeds its allocated bandwidth, stored by the bandwidth manager 150. See column 12, lines 66-67 and column 13, line 1,)

Issuing access permission to said any one of said optical network units according to said bandwidth set to be usable by said any one of said optical network units (Referring to Figure 8, centralized call admission control/monitor module 145 tags the borrowed bandwidth requests and returns the requests, which are utilized for setting up the virtual path, to the client according to the assigned bandwidth by the bandwidth manager module 150. See column 7, lines 61-63.)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1-4, 6, 9, 11-13, 15, and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over by Ma et al (US 5,953,338), hereinafter referred to as Ma.

Regarding claim 1, Ma discloses a dynamic admission control system for ATM networks, which comprises:

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A traffic supervisory unit for supervising traffic situation of upstream ATM cells sending to said own ATM communication apparatus from a plurality of optical network units (Referring to Figure 1B, centralized control module 160 coupled to ATM switch 130A manages calls for the network from customer networks 110A, 110B, 110C, ..., which are optically coupled. See column 6, lines 35-36,) the traffic supervisory unit having a supervisory unit of a receiving bandwidth for detecting the receiving bandwidth for receiving ATM cells from each of said by optical network units (Referring to Figure 1B, 9A, and 9B, centralized call admission control/usage monitor module 145 monitors the traffic load of clients. See column 8, lines 13-17,) and a supervisory unit of cell overflow situation for detecting cell overflow situation of a sending buffer of ATM cells in each of said optical network units (Note: Examiner interprets cell overflow as a condition when allocated bandwidth is exceeded, which is consistent with the Applicant's definition on page 18, lines 19-25. Referring to Figures 1B, 9A, and 9B, centralized call admission control/usage monitor module 145 dynamically allocates additional bandwidth when a client exceeds its allocated bandwidth. See column 7, lines 56-59.)

A bandwidth controller having a basic bandwidth assigner for assigning the basic bandwidth for sending ATM cells to each of said optical network units, an upper-limit bandwidth storage means for storing an upper-limit bandwidth set as an upper limit of bandwidth for transmission of ATM cells of each of said optical network units, a shared bandwidth assigner for assigning a shared bandwidth which is usable with a basic bandwidth to each of said optical network units according to value of said upper-limit bandwidth based on a receiving bandwidth and cell overflow situation are supplied from the traffic supervisory unit (Referring to Figures 1B, 9A, and 9B, bandwidth manager 150 dynamically manages bandwidths utilized by virtual

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paths in reaction or anticipation to traffic volume levels, comprising a base level. The bandwidth manager 150 assigns shared bandwidth (usable with the base level) based upon the bandwidth capacity (upper-limit bandwidth), monitored bandwidth, and the scenario when a client exceeds its allocated bandwidth, in response to the usage monitor module 145. See column 12, lines 66-67 and column 13, line 1,) *and a shared bandwidth storage means for storing shared bandwidth assigned to each of said optical network units by said shared bandwidth* (Referring to Figure 1B, bandwidth manager 150 comprises memory for storing the received instructions.)

A generator of access permission for generating access permission to said assigned optical network units according to the shared bandwidth assigned by said bandwidth controller (Referring to Figure 8, centralized call admission control/monitor module 145 tags the borrowed bandwidth requests and returns the requests, which are utilized for setting up the virtual path, to the client according to the assigned bandwidth by the bandwidth manager module 150. See column 7, lines 61-63.)

Ma does not disclose *an ATM communication apparatus connected with a plurality of optical network units for issuing access permission to permit transmission of ATM cells to said plurality of optical network units and for receiving ATM cells.*

Ma teaches an ATM dynamic admission control system 160 connected to ATM switch 130A which manages calls for the ATM network from optically coupled customer networks 110A, 110B, 110C, ... (See Figure 1B and Abstract.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the control module of Ma in an ATM switch. One of ordinary skill in the art would

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have been motivated to do so in order to consolidate systems, reduce costs, and increase system efficiency. In so doing, unexpected results are not generated.

Regarding claims 2 and 12, the primary reference further teaches *a bandwidth fair distributor for assigning the shared bandwidth based on the receiving bandwidth and the cell overflow situation supplied by the traffic supervisory unit* (Referring to Figures 1B, 9A, and 9B, bandwidth manager 150 dynamically manages bandwidths utilized by virtual paths in reaction or anticipation to traffic volume levels, inherently assigning shared bandwidth based upon the bandwidth capacity, monitored bandwidth, and the scenario when a client exceeds its service level, in response to the usage monitor module 145. See column 12, lines 66-67 and column 13, line 1;) *and an upper-limit bandwidth limiter for limiting the upper-limit bandwidth based on the upper-limit bandwidth stored in the upper-limit bandwidth storage means* (Referring to Figure 10, bandwidth manager module 150 calculates the sum of the bandwidth for all virtual channels on each virtual path to determine whether the total virtual channel bandwidth is larger (upper-limit bandwidth) than the new virtual path bandwidth. See column 13, lines 43-47.)

Regarding claims 3 and 11, the primary reference further teaches *a plurality of divided sub-shared bandwidth storage means and the shared bandwidth assigner further comprises a shared bandwidth selector for selecting any one of a plurality of the sub-shared bandwidth storage means for each of said optical network units* (Referring to Figure 2, centralized control module 160 allows a carrier to dynamically assign unused capacity to other clients, inherently comprising sub-shared bandwidth and memory to store the allocation of the bandwidth. See column 8, lines 54-59.)

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Regarding claims 4 and 13, the primary reference further teaches *an access bandwidth storage means for storing an access bandwidth which is made by adding said basic bandwidth and said shared bandwidth for each of said optical network units* (Note: the Examiner interprets the access bandwidth as logically equivalent to the upper-limit bandwidth, since it is defined as the total capacity of the link. Referring to Figures 1B, 9A, and 9B, bandwidth manager 150 dynamically manages bandwidths utilized by virtual paths in reaction or anticipation to traffic volume levels, comprising a base level. The bandwidth manager 150 assigns shared bandwidth (usable with the base level) based upon the bandwidth capacity (upper-limit bandwidth), monitored bandwidth, and the scenario when a client exceeds its allocated bandwidth, stored by the bandwidth manager 150. See column 12, lines 66-67 and column 13, line 1,) *a bandwidth comparator that compares the receiving bandwidth of effective cells received from each of the optical network units and judges that the cell is in the overflow situation in the case where an access bandwidth judged by the bandwidth controller and a receiving cell bandwidth of each of the optical network units are the same or approximately the same* (Note: Examiner interprets cell overflow as a condition when allocated bandwidth is exceeded, which is consistent with the Applicant's definition on page 18, lines 19-25. Referring to Figures 1B, 9A, and 9B, centralized call admission control/usage monitor module 145 dynamically allocates additional bandwidth when a client exceeds its service level agreement. See column 7, lines 56-59.)

Regarding claims 6 and 15, the primary reference further teaches *assigning a plurality of separate assignment bandwidths for one optical network unit to a plurality of shared bandwidths respectively* (Referring to Figure 1B, when a client is not using all of the capacity which the

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client has a reservation to, the unused capacity is made available to other clients. See column 8, lines 57-59.)

Regarding claims 9 and 18, the primary reference further teaches *assigning one of the basic bandwidth and the shared bandwidth based on the contents of a plurality of subscriber contracts set for one optical network unit* (Referring to Figure 1B, 5A, 5B, 5C, and 5D, if a client is not using all of the capacity which the client has a reservation to use according to their contracts, the unused capacity is made available to other clients. See column 11, lines 66-67 and column 12, lines 1-6 and 26-30.)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 5,953,338), hereinafter referred to as Ma, in view of Norizuki et al. (US 5,357,510), hereinafter referred to as Norizuki.

Regarding claims 5 and 14 as explained above in the rejection statement of claims 1 and 10; Ma teaches all of the claim limitations of claims 1 and 10 (parent claims). Ma does not disclose *an invalid cell detector that detects invalid cells received from each of said optical network units and judges that the detected invalid cell is in the cell overflow situation in a case where the invalid cell was not detected by the optical network units.*

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Norizuki teaches a method for controlling ATM traffic by detecting the idle cell rate transferring inside the ATM switch unit 107 since the ATM switch unit 107 inserts an idle cell into a transmission-line when there is no user information cell on the transmission-line so as to keep the cell boundaries clear between a user information cell and an idle cell (See column 7, lines 7-12.) Norizuki further teaches counting a series of user information cells between each idle cell to detect a burst transmission that may cause traffic congestion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the idle cell detection method of Norizuki in the system of Ma to detect the absence of expected idle cells for determining traffic congestion at a node. One of ordinary skill in the art would have been motivated to do so in order to provide additional bandwidth to a congested client when they exceed their contracted service agreement as taught by Ma (See column 7, lines 56-61.)

10. Claims 7, 8, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 5,953,338), hereinafter referred to as Ma, in view of Umehira et al. (US 6,188,697 B1), hereinafter referred to as Umehira.

Regarding claims 7 and 16 as explained above in the rejection statement of claims 1 and 10; Ma teaches all of the claim limitations of claims 1 and 10 (parent claims). Ma does not disclose *assigning the shared bandwidth based on a predetermined priority for each of the sub-shared bandwidths.*

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Umehira teaches an ATM cell transport system comprising cells with a high and low priority. And during output intervals of cells of a high priority, lower priority cells are inserted when unused bandwidth is available (See Figure 2, column 7, lines 30-42.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement cell priority method of Umehira in the system of Ma. One of ordinary skill in the art would have been motivated to do so in order to realize a system that provides high frequency utilization efficiency that is capable of making efficient use of allocated bandwidth for different classes of service.

Regarding claims 8 and 17 as explained above in the rejection statement of claims 1 and 10, Ma teaches all of the claim limitations of claims 1 and 10 (parent claims). Ma does not disclose *providing a plurality of kinds basic bandwidths and assigning the shared bandwidth in proportion to each of the basic bandwidths.*

Umehira teaches an ATM cell transport system comprising cells with a high and low priority buffers. And during output intervals of cells of a high priority, lower priority cells are inserted, directly proportional to the number of buffers, when unused bandwidth is available (See Figure 2, column 7, lines 30-42.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement cell priority method of Umehira in the system of Ma. One of ordinary skill in the art would have been motivated to do so in order to realize a system that provides high frequency utilization efficiency that is capable of making efficient use of allocated bandwidth for different classes of service.

Response to Arguments

11. Applicant's arguments with respect to the rejection under 35 § USC 112, filed September 9, 2004, have been fully considered but they are not persuasive.

Rejection Under 35 § USC 112

On page 13 of the remarks, regarding claims 5 and 14, Applicant argues the amended claims overcome the rejection. The Examiner respectfully disagrees. The amended claims now more directly reflect the function of the invalid cell detector; however, it is still unclear from the context of the claim what constitutes an "invalid cell." One of ordinary skill in the art would not be able to ascertain whether an "invalid cell" is a cell consisting of less than 53 bytes, a unique cell, or an error cell. The rejection could potentially be overcome by describing what an "invalid cell" refers to.

12. Applicant's arguments with respect to the prior art rejections under 35 § USC 102 and 103, regarding claims 1-18, have been considered but are moot in view of the new ground(s) of rejection. For further clarification, the Examiner provides the following information.

On page 16 of the remarks, regarding claims 1 and 10, the Applicant argues Ma discloses a process and system for measuring the load of the network, whereas, the instant application relates to measuring received ATM cells and invalid cells. However, the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

On page 17 of the remarks, regarding claims 1 and 10, the Applicant argues Ma does not disclose *a shared bandwidth assigner for assigning a shared bandwidth which is usable with a*

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basic bandwidth to each of said optical network units according to value of said upper-limit bandwidth based on a receiving bandwidth and cell overflow situation are supplied from the traffic supervisory unit. The instant application defines the “upper-limit bandwidth” as the uppermost bandwidth that can be assigned from the shared bandwidths (See page 21, lines 20-21.) Ma discloses the maximum transmission capacity as the bandwidth capacity (See column 12, lines 66-67 and column 13, line 1.) Based upon the Applicant’s description of the “upper-limit bandwidth,” the Examiner interprets the “upper-limit bandwidth” as logically equivalent to the bandwidth capacity. And, Ma discloses bandwidth manager 150, which dynamically manages bandwidths utilized by virtual paths in reaction or anticipation to traffic volume levels, comprising a base level. The bandwidth manager 150 assigns shared bandwidth (usable with the base level) when a client exceeds its allocated bandwidth, based upon the bandwidth capacity (upper-limit bandwidth) and monitored bandwidth as detected by the usage monitor module 145 (See column 12, lines 66-67 and column 13, line 1.) Therefore, Ma discloses *a shared bandwidth assigner for assigning a shared bandwidth which is usable with a basic bandwidth to each of said optical network units according to value of said upper-limit bandwidth based on a receiving bandwidth and cell overflow situation are supplied from the traffic supervisory unit.*

On page 17 of the remarks, regarding claims 1 and 10, the Applicant argues Ma does not disclose *access permission*. The Examiner respectfully disagrees. First, the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Second, the claims recite *generating access permission to said assigned optical network units according to the shared*

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bandwidth assigned by said bandwidth controller, which the Examiner equates to the dynamic management of bandwidth, utilized by the virtual paths, for increasing link capacity (access permission) according to the shared bandwidth for the ATM switches coupled to the customer networks of Ma. Therefore, Ma does disclose *access permission*.

The Examiner recognizes that the invention of the instant application and the invention of the prior art are drawn to different inventions. However, based upon a broad and literal interpretation of the claims, the instant application is unpatentable over Ma. The Examiner notes that should the claims be amended to further reflect the “reassignment of bandwidth” and “access permission” as described in the specification the rejection based upon the prior art could be overcome.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

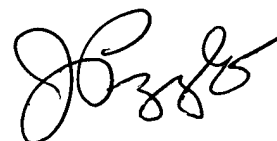
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald Mills



January 13, 2005



JOHN PEZZLO
PRIMARY EXAMINER